

# Nationwide House Energy Rating Scheme NatHERS Certificate No. 0005662499

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## Property

**Address** 37 Heath Street , Mona Vale , NSW ,  
2103

**Lot/DP** 31/7236

**NCC Class\*** 1A

**Type** New Dwelling

## Plans

**Main Plan** Reef House, Dated 11/1/2021, Sheets 1-  
14

**Prepared by** markham-lee architecture

## Construction and environment

Assessed floor area (m <sup>2</sup> )*	Exposure Type
Conditioned* 296.0	Suburban
Unconditioned* 28.0	<b>NatHERS climate zone</b>
Total 325.0	56
Garage 0.0	



## Accredited assessor

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**Accreditation No.** 13/1547

**Assessor Accrediting Organisation**  
Design Matters National

**Declaration of interest** None

## National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at [www.abcb.gov.au](http://www.abcb.gov.au).

State and territory variations and additions to the NCC may also apply.

**5.2**  
The more stars  
the more energy efficient

**NATIONWIDE  
HOUSE**  
ENERGY RATING SCHEME

**63.2 MJ/m<sup>2</sup>**  
Predicted annual energy load for  
heating and cooling based on standard  
occupancy assumptions.

For more information on  
your dwelling's rating see:  
[www.nathers.gov.au](http://www.nathers.gov.au)

## Thermal performance

Heating	Cooling
<b>37.4</b> MJ/m <sup>2</sup>	<b>25.8</b> MJ/m <sup>2</sup>

## About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

## Verification

To verify this certificate, scan the QR code or visit [hstar.com.au/QR/Generate?p=BVKyTUKza](http://hstar.com.au/QR/Generate?p=BVKyTUKza).

When using either link, ensure you are visiting [hstar.com.au](http://hstar.com.au)



## Certificate check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

### Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

### Ceiling penetrations\*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

### Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

### Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

### Exposure\*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

### Provisional\* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

## Additional notes

## Window and glazed door *type and performance*

### Default\* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
ATB-004-01 B	ATB-004-01 B AI Thermally Broken B DG Air Fill Clear-Clear	3.6	0.54	0.51	0.57
ALM-004-03 A	ALM-004-03 A Aluminium B DG Air Fill High Solar Gain low-E -Clear	4.3	0.53	0.50	0.56
CMP-004-03 I	CMP-004-03 I Composite B DG Air Fill High Solar Gain low-E -Clear	3.4	0.53	0.50	0.56
ATB-003-01 B	ATB-003-01 B AI Thermally Broken A DG Air Fill Clear-Clear	3.6	0.47	0.45	0.49

## Custom\* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Entry	ATB-004-01 B	n/a	2700	1750	n/a	00	S	No
Entry	ATB-004-01 B	n/a	2700	1400	n/a	00	W	No
Entry	ATB-004-01 B	n/a	2700	1400	n/a	00	W	No
Entry	ALM-004-03 A	n/a	2700	700	n/a	90	W	No
Entry	ALM-004-03 A	n/a	2700	700	n/a	90	W	No
Entry	ATB-004-01 B	n/a	2400	400	n/a	00	N	No
Entry	ATB-004-01 B	n/a	250	1750	n/a	00	N	No
Kitchen/Living	CMP-004-03 I	n/a	600	3900	n/a	00	W	Yes
Kitchen/Living	CMP-004-03 I	n/a	2100	3900	n/a	00	W	No
Kitchen/Living	ATB-004-01 B	n/a	2400	6800	n/a	60	N	No
Kitchen/Living	ATB-003-01 B	n/a	1500	3200	n/a	90	N	No
Kitchen/Living	ATB-004-01 B	n/a	250	5000	n/a	00	N	No
Kitchen/Living	ATB-004-01 B	n/a	250	5000	n/a	00	N	No
Kitchen/Living	ATB-004-01 B	n/a	650	4300	n/a	30	E	No
Kitchen/Living	ATB-004-01 B	n/a	700	1100	n/a	00	S	No
Kitchen/Living	CMP-004-03 I	n/a	2100	3900	n/a	00	E	No
Kitchen/Living	CMP-004-03 I	n/a	600	3900	n/a	00	E	Yes
Media	ATB-004-01 B	n/a	2400	3200	n/a	45	N	No
Media	ATB-004-01 B	n/a	250	3200	n/a	00	N	No
Media	ATB-004-01 B	n/a	2400	3200	n/a	45	S	No
Media	ATB-004-01 B	n/a	250	3200	n/a	00	S	No
Bath	ATB-004-01 B	n/a	2400	1800	n/a	45	S	No
Laundry	ATB-004-01 B	n/a	2400	1000	n/a	90	S	No
Bed 4	ATB-004-01 B	n/a	250	1600	n/a	00	S	No
Bed 4	ATB-004-01 B	n/a	2400	1600	n/a	90	S	No
Bed 4	ATB-004-01 B	n/a	2650	1560	n/a	00	N	No
2nd living	CMP-004-03 I	n/a	2800	3900	n/a	00	W	Yes
2nd living	ATB-004-01 B	n/a	300	3900	n/a	00	W	No
2nd living	CMP-004-03 I	n/a	2400	1400	n/a	45	W	No
2nd living	ATB-004-01 B	n/a	250	8400	n/a	00	W	No
2nd living	ATB-004-01 B	n/a	250	5000	n/a	30	N	No
2nd living	CMP-004-03 I	n/a	2400	5100	n/a	00	N	Yes
2nd living	CMP-004-03 I	n/a	2800	3900	n/a	00	E	Yes

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
2nd living	ATB-004-01 B	n/a	300	3900	n/a	00	E	No
Bed 1	ATB-004-01 B	n/a	2400	5000	n/a	60	N	Yes
Bed 1	ATB-004-01 B	n/a	250	5000	n/a	30	N	No
Bed 1	ALM-004-03 A	n/a	2400	850	n/a	90	E	No
Bed 1	ATB-004-01 B	n/a	250	1700	n/a	00	E	No
Bed 1	ATB-004-01 B	n/a	250	4800	n/a	00	E	No
ens	ATB-004-01 B	n/a	250	3500	n/a	00	E	No
ens	ALM-004-03 A	n/a	2400	850	n/a	90	E	No
ens	ALM-004-03 A	n/a	2550	650	n/a	90	S	No
ens	ALM-004-03 A	n/a	2550	600	n/a	90	S	No
ens	ATB-004-01 B	n/a	250	3300	n/a	00	S	No
Bed 3	ATB-004-01 B	n/a	250	4300	n/a	00	E	No
Bed 3	ATB-004-01 B	n/a	1400	1500	n/a	10	S	No
Bed 3	ATB-004-01 B	n/a	1400	1500	n/a	10	N	No
Bed 3	ATB-004-01 B	n/a	250	3300	n/a	00	N	No
Bed 3	ATB-004-01 B	n/a	250	3300	n/a	00	S	No Shading
Ens b3	ALM-004-03 A	n/a	2400	850	n/a	90	S	No
Ens b3	ATB-004-01 B	n/a	250	2599	n/a	00	S	No
Ens b3	ATB-004-01 B	n/a	300	2600	n/a	00	S	No Shading
Ens b2	ALM-004-03 A	n/a	2400	1700	n/a	90	S	No
Ens b2	ATB-004-01 B	n/a	250	2599	n/a	00	S	No
Ens b2	ATB-004-01 B	n/a	300	2600	n/a	00	S	No Shading
Bed 2	ATB-004-01 B	n/a	1400	1500	n/a	10	S	No
Bed 2	ATB-004-01 B	n/a	250	4300	n/a	00	W	No
Bed 2	ATB-004-01 B	n/a	250	1650	n/a	00	N	No
Bed 2	ATB-004-01 B	n/a	1400	1500	n/a	10	N	No
Bed 2	ATB-004-01 B	n/a	250	3300	n/a	00	S	No Shading

## Roof window type and performance

### Default\* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

### Custom\* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
VEL-011-02 W	Glass	2.7	0.24	0.23	0.25

## Roof window schedule

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orientation	Outdoor shade	Indoor shade
2nd living	VEL-011-02 W	n/a	0	1500	4000	E	No	No

## Skylight type and performance

Skylight ID	Skylight description
No Data Available	

## Skylight schedule

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m <sup>2</sup> )	Orientation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Available								

## External door schedule

Location	Height (mm)	Width (mm)	Opening %	Orientation
Entry	2340	1300	90	N

## External wall type

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Fibro Cavity Panel Direct Fix	0.50	Medium	Bulk Insulation R2.5	No
EW-2	Brick Veneer	0.50	Medium	Bulk Insulation R2.5	No

## External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Entry	EW-1	2700	1745	S	4100	YES
Entry	EW-1	2700	8600	W	550	NO
Entry	EW-1	2700	1795	N	1900	NO
Kitchen/Living	EW-2	2700	4095	W	0	YES
Kitchen/Living	EW-1	2700	10395	N	4000	NO
Kitchen/Living	EW-2	2700	8500	E	0	NO
Kitchen/Living	EW-1	2700	3400	S	4200	YES
Kitchen/Living	EW-2	2700	4195	E	0	YES
Media	EW-2	2700	3400	N	4200	YES
Media	EW-2	2700	4400	E	0	NO
Media	EW-2	2700	3200	S	500	NO
Media	EW-2	2701	1395	S	0	NO

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Bath	EW-1	2700	2290	S	0	NO
Laundry	EW-2	2700	1890	S	0	NO
Bed 4	EW-2	2700	3395	S	500	NO
Bed 4	EW-2	2700	4400	W	0	NO
Bed 4	EW-2	2700	1800	N	4100	YES
2nd living	EW-2	3100	4195	W	800	YES
2nd living	EW-2	2800	8500	W	800	NO
2nd living	EW-1	2800	5295	N	5100	YES
2nd living	EW-2	3100	4200	E	0	YES
Bed 1	EW-1	2800	1800	W	6100	YES
Bed 1	EW-1	2800	5100	N	3300	NO
Bed 1	EW-2	2801	1800	E	800	NO
Bed 1	EW-2	2800	4895	E	800	NO
ens	EW-2	2800	3595	E	800	NO
ens	EW-1	2800	3395	S	4200	YES
Bed 3	EW-2	2800	4400	E	800	NO
Bed 3	EW-1	2400	500	E	800	NO
Bed 3	EW-1	2400	3400	S	300	NO
Bed 3	EW-1	2400	500	W	9600	YES
Bed 3	EW-1	3000	3395	N	4200	YES
Ens b3	EW-2	3300	2590	S	800	YES
Ens b2	EW-2	3300	2590	S	800	YES
Bed 2	EW-1	2400	500	E	9400	YES
Bed 2	EW-1	2400	3600	S	300	NO
Bed 2	EW-1	2400	500	W	800	NO
Bed 2	EW-2	2800	4400	W	800	NO
Bed 2	EW-2	3000	1800	N	800	YES

## Internal wall type

Wall ID	Wall type	Area (m <sup>2</sup> )	Bulk insulation
IW-1	Cavity wall, direct fix plasterboard, single gap	55.00	Bulk Insulation, No Air Gap R2.5
IW-2	Cavity Brick	6.00	No insulation
IW-3	Cavity wall, direct fix plasterboard, single gap	113.00	No insulation

## Floor type

Location	Construction	Area (m <sup>2</sup> )	Sub-floor ventilation	Added insulation (R-value)	Covering
Entry	Concrete Slab on Ground 100mm	15.10	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab on Ground 100mm	120.80	None	No Insulation	Bare
Media	Concrete Slab on Ground 100mm	20.50	None	No Insulation	Bare
Bath	Concrete Slab on Ground 100mm	7.20	None	No Insulation	Ceramic Tiles 8mm
Laundry	Concrete Slab on Ground 100mm	5.90	None	No Insulation	Ceramic Tiles 8mm
Bed 4	Concrete Slab on Ground 100mm	14.90	None	No Insulation	Bare
2nd living/Kitchen/Living	Timber Above Plasterboard 100mm	80.50		No Insulation	Cork Tiles or Parquetry 8mm
2nd living/Media	Timber Above Plasterboard 100mm	3.00		No Insulation	Cork Tiles or Parquetry 8mm
2nd living/Bath	Timber Above Plasterboard 100mm	2.30		No Insulation	Cork Tiles or Parquetry 8mm
2nd living/Laundry	Timber Above Plasterboard 100mm	1.70		No Insulation	Cork Tiles or Parquetry 8mm
Bed 1/Kitchen/Living	Timber Above Plasterboard 19mm	27.60		No Insulation	Cork Tiles or Parquetry 8mm
Bed 1	Suspended Timber Floor 19mm	9.00	Open	Bulk Insulation in Contact with Floor R2.5	Cork Tiles or Parquetry 8mm
ens/Kitchen/Living	Timber Above Plasterboard 100mm	11.90		No Insulation	Ceramic Tiles 8mm
Bed 3/Media	Timber Above Plasterboard 19mm	14.80		No Insulation	Cork Tiles or Parquetry 8mm
Bed 3	Suspended Timber Floor 19mm	1.70	Open	Bulk Insulation in Contact with Floor R2.5	Cork Tiles or Parquetry 8mm
Ens b3/Media	Timber Above Plasterboard 100mm	2.60		No Insulation	Ceramic Tiles 8mm
Ens b3/Bath	Timber Above Plasterboard 100mm	3.00		No Insulation	Ceramic Tiles 8mm
Ens b2/Bath	Timber Above Plasterboard 100mm	2.00		No Insulation	Ceramic Tiles 8mm
Ens b2/Laundry	Timber Above Plasterboard 100mm	3.70		No Insulation	Ceramic Tiles 8mm
Bed 2/Laundry	Timber Above Plasterboard 19mm	0.70		No Insulation	Cork Tiles or Parquetry 8mm
Bed 2/Bed 4	Timber Above Plasterboard 19mm	14.90		No Insulation	Cork Tiles or Parquetry 8mm
Bed 2	Suspended Timber Floor 19mm	1.80	Open	Bulk Insulation in Contact with Floor R2.5	Cork Tiles or Parquetry 8mm

## Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Entry	Plasterboard	Bulk Insulation R5	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Media	Timber Above Plasterboard	No Insulation	No
Bath	Timber Above Plasterboard	No Insulation	No
Laundry	Timber Above Plasterboard	No Insulation	No

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Bed 4	Timber Above Plasterboard	No Insulation	No
2nd living	Plasterboard	Bulk Insulation R5	No
Bed 1	Plasterboard	Bulk Insulation R5	No
ens	Plasterboard	Bulk Insulation R5	No
Bed 3	Plasterboard	Bulk Insulation R5	No
Ens b3	Plasterboard	Bulk Insulation R5	No
Ens b2	Plasterboard	Bulk Insulation R5	No
Bed 2	Plasterboard	Bulk Insulation R5	No

### Ceiling penetrations\*

Location	Quantity	Type	Diameter (mm <sup>2</sup> )	Sealed/unsealed
Entry	6	Downlights - LED	150	Sealed
Kitchen/Living	30	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	160	Sealed
Media	8	Downlights - LED	150	Sealed
Bath	3	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Laundry	3	Downlights - LED	150	Sealed
Bed 4	6	Downlights - LED	150	Sealed
2nd living	35	Downlights - LED	150	Sealed
2nd living	1	Chimneys	300	Sealed
Bed 1	15	Downlights - LED	150	Sealed
ens	5	Downlights - LED	150	Sealed
ens	1	Exhaust Fans	300	Sealed
Bed 3	7	Downlights - LED	150	Sealed
Ens b3	2	Downlights - LED	150	Sealed
Ens b3	1	Exhaust Fans	300	Sealed
Ens b2	2	Downlights - LED	150	Sealed
Ens b2	1	Exhaust Fans	300	Sealed
Bed 2	7	Downlights - LED	150	Sealed

### Ceiling fans

Location	Quantity	Diameter (mm)
Kitchen/Living	1	900
Media	1	900
Bed 4	1	900
2nd living	1	900



Location	Quantity	Diameter (mm)
Bed 1	1	900
Bed 3	1	900
Bed 2	1	900

## Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.8	0.50	Medium

## Explanatory notes

### About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

### Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

### Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content of each individual certificate is entered and created by the assessor to create a NatHERS Certificate. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate.

Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

## Glossary

<b>Annual energy load</b>	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
<b>Assessed floor area</b>	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
<b>Ceiling penetrations</b>	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
<b>Conditioned</b>	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
<b>Custom windows</b>	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
<b>Default windows</b>	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
<b>Entrance door</b>	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
<b>Exposure category – exposed</b>	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
<b>Exposure category – open</b>	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
<b>Exposure category – suburban</b>	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
<b>Exposure category – protected</b>	terrain with numerous, closely spaced obstructions over 10m e.g. city and industrial areas.
<b>Horizontal shading feature</b>	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
<b>National Construction Code (NCC) Class</b>	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at <a href="http://www.abcb.gov.au">www.abcb.gov.au</a> .
<b>Opening percentage</b>	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
<b>Provisional value</b>	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at <a href="http://www.nathers.gov.au">www.nathers.gov.au</a>
<b>Reflective wrap (also known as foil)</b>	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
<b>Roof window</b>	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
<b>Shading device</b>	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
<b>Shading features</b>	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
<b>Solar heat gain coefficient (SHGC)</b>	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
<b>Skylight (also known as roof lights)</b>	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
<b>U-value</b>	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
<b>Unconditioned</b>	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
<b>Vertical shading features</b>	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).